Cotton/Soybean Insect Newsletter

Volume 14, Issue #5 **Edisto Research & Education Center in Blackville, SC** **21 June 2019**

Pest Patrol Alerts

The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen the in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at @bugdocisin on Twitter.

Scouting Workshops

Your ag-focused county agents and I will be offering some in-field scouting workshops for cotton and soybean insects this summer, so stay tuned for those dates. The first interactive workshop will be held on 18 July in Cameron, SC. The flyer for that will be attached to the email for this newsletter. We might have other trainings…still working on those. The trainings will be free to attend, start in the morning, include lunch, and end shortly after that. Stay tuned for more information!

News from Around the State

Drake Perrow, consultant in Cameron, SC, reported seeing some large horned caterpillars in peanuts. These can crawl on the ground in large numbers and be a scary site. Those are larvae of the white-lined sphinx moth. They feed on weed hosts, such as cutleaf evening primrose, and move into the field edges of crops when those weeds dry down. They are large caterpillars, and they can do some cosmetic damage on the edges of fields, but the collective recommendation across the Southeast is to "let them go" and not spend money on control, as a return on the spray is not likely. Here are a couple of photos of them as different color forms. **Mitch Binnarr**, with Phytogen, reported seeing "lots of stink bugs in corn and around pecan trees. Aphids and lady [beetles] in squaring cotton, as we move on from the worst thrips activity in mid-to-late-May cotton I've seen in many years."

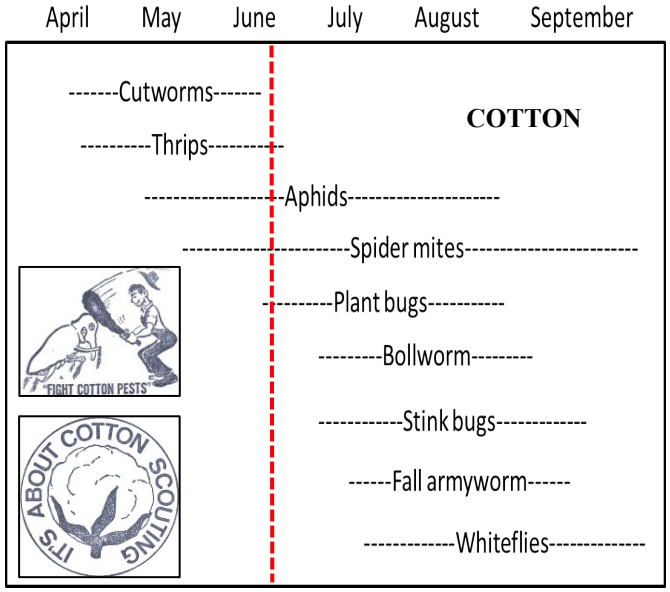
Cotton Situation

As of 16 June 2019, the USDA NASS South Carolina Statistical Office estimated that about 99% of the crop has been planted, compared with 98% the previous week, 95% at this time last year, and 96% for the 5-year average. About 25% of the crop is squaring, compared with 3% at this time last year, 17% at this time last year, and 15% for the 5-year average. The condition of the crop was described as 1% excellent, 57% good, 36% fair, 6% poor, and 0% very poor. These are observed/perceived state-wide averages.

Cotton Insects

Arthropods such as spider mites are probably being hit hard by these scattered rains, so we will not spend much time on them here this week, but do look for them. Scout! Look for the stippling that you will see on the upper surface of leaves around the venation (below at right). You will also see pale areas underneath the leaves between the leaf venation (shown below). Mites and eggs will be here.

We have been sampling for tarnished plant bug (TPB) around the state, and we are finding fields below and at threshold. So far, no fields have **exceeded** threshold…we have just been right at threshold with



numbers of plant bugs (8 per 100 sweeps) and square retention on the bubble also (<75%). I do want to point out that, although TPB is likely becoming more of an issue in the Southeast, it is not the same problem that they have in the Mid-South, where TPB is the #1 insect pest of cotton. We are using their treatment thresholds, but, remember, they have to be aggressive and not get behind, as the pest continues to be an issue

through the season for them. We might not need to be as aggressive in controlling TPB here. That might help with some borderline threshold numbers for TPB and deciding whether or not to spray or wait another week. We have just not had enough TPB here in reliable numbers to conduct a large amount of threshold research in the Southeast. For now, we will use the treatment thresholds of 8 TPB per 100 sweeps with a sweep net or 3 TPB per 5 rowft using the black drop cloth. Look at the photos of TPB in last week's newsletter, if you need a refresher on characters for recognizing the species. A small nymph on the dark cloth (at right) will look like a green aphid but will run fast on the cloth. Aphids will not run across the cloth like small plant bugs. We found adults and a few nymphs this week, so reproduction is underway. I also included sources for purchasing sweep nets and dropcloths in the newsletter last week, but those are below again. Check squaring cotton for adult TPB now, and only consider treating if you exceed 8 TPB/100 sweeps. Get sweep nets from www.sweepnets.com ($47 each), www.gemplers.com ($78 each), or anywhere else you can find them for sale. Get drop cloths from www.greatlakesipm.com ($24 each) or anywhere else you can find them for sale. You will want to switch to a drop cloth when the cotton gets big enough to sample with a drop cloth (plants tall enough to bend over the cloth and shake out insects). Sweep nets are most useful only when the cotton is really too small for a drop cloth, and they are really only good for counting adults. When nymphs are present, you want to use the black drop cloth to detect them.

As I mentioned last week, we will continue to look for infestations of cotton aphid, as it is capable of transmitting a virus (cotton leaf roll dwarf virus - CLRDV) to cotton that has been detected here in the Southeast. The disease that shows up after

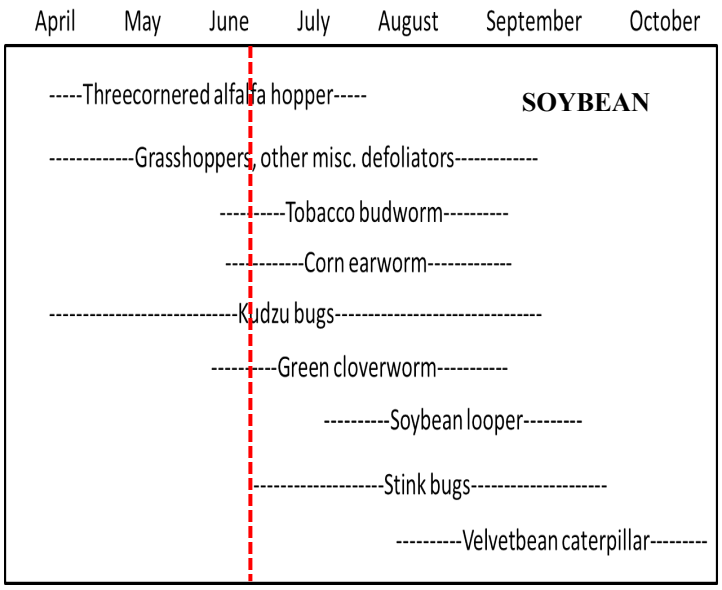
CLRDV (Blue disease)

Information courtesy of Dr. Alana Jacobson, Auburn

infected aphids feed on cotton is called Cotton Blue Disease. It gets that name because one of the symptoms is darkened leaves that almost look blue in color. Most of the other symptoms are tightly stacked nodes, cupped and crinkled leaves, and other discolorations. There are photos of the symptoms in last week's newsletter and a few below. We will be looking at this closely this season and researching many aspects of cotton as a vector of this virus and disease. As I mentioned last week, we do not know if we can address this problem with targeted insecticide sprays for aphids, so do NOT panic about aphids and spray when you might not need to do so. Again, my stance has not changed on aphids…I think they are mostly food for beneficial arthropods in the field, and we should let many populations of aphids go without spraying. However, if cotton is young and infested heavily, that can be a situation where treatment could be beneficial. Also, if plants are under drought stress and heavily infested, that would be another situation where a spray might be good. Right now, the rains have allowed the crop to grow, alleviating some stress but also allowing aphids to build. Let's keep an eye out for aphid infestations and watch out for disease symptomology (crinkled, irregular leaves, stacked nodes, etc.). You can stand some aphids in the field that look as bad as this (at right) on some plants, but just watch them to see how uniform and bad it gets across the field.

Soybean Situation

As of 16 June 2019, the USDA NASS South Carolina Statistical Office estimated that about 69% of the crop has been planted, compared with 53% the previous week, 88% at this time last year, and 78% for the 5-year average. About 52% of the crop has emerged, compared with 39% the previous week, 62% at this time last year, and 62% for the 5-year average. The condition of the crop was described as 0% excellent, 80% good, 20% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

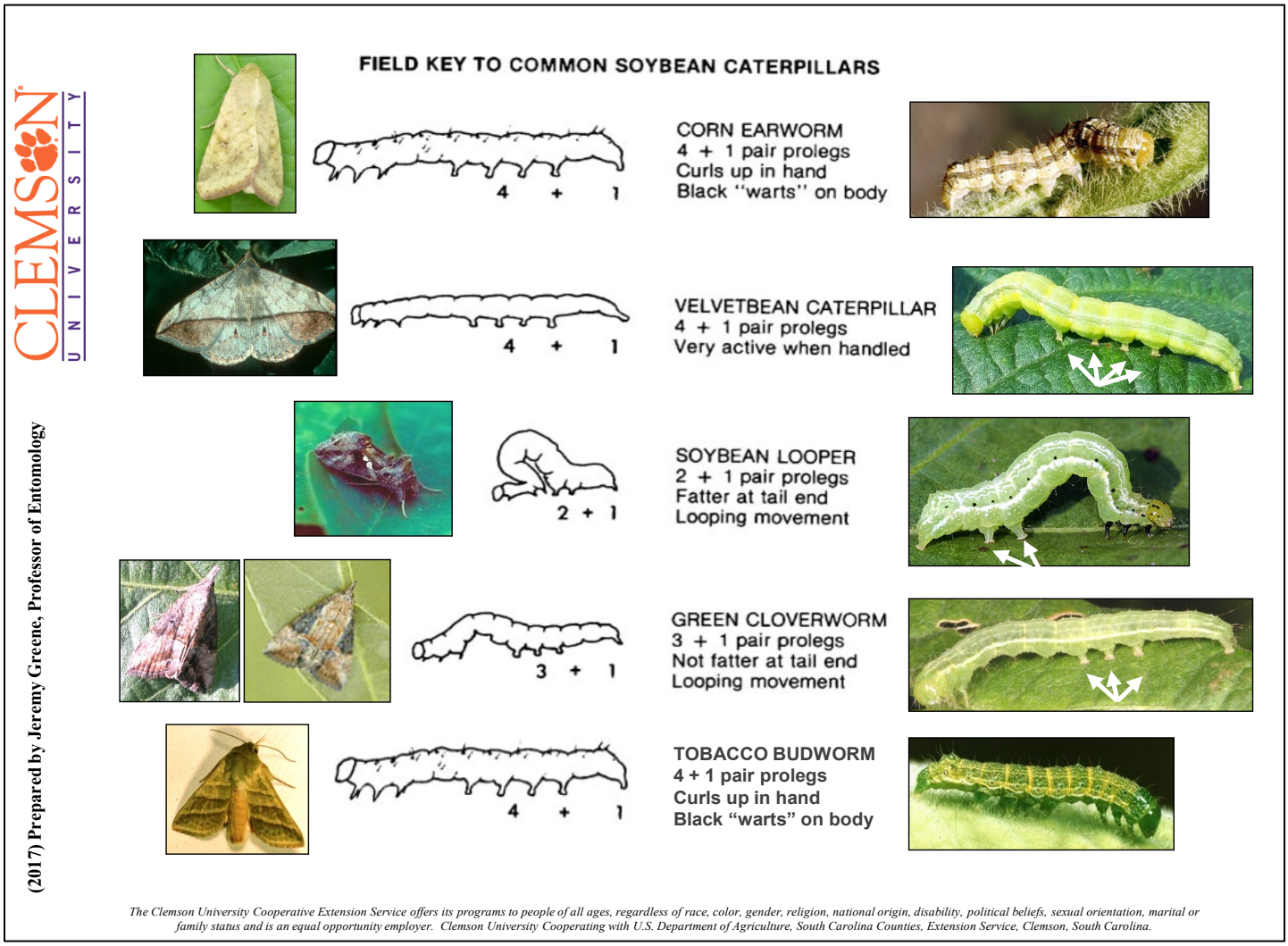


Soybean Insects

Numbers of kudzu bugs have picked up in our counts, and we are starting to see small numbers of migratory species, such as soybean looper, showing up early. We are also seeing stink bugs in some of my plots with early pods, and many of them have been the redbanded stink bug (RBSB), a species a little

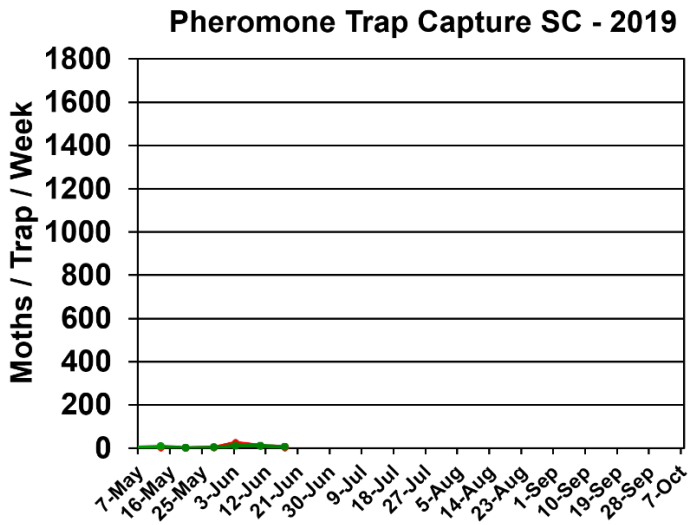
tougher to kill that the “green” species. It is as tough as the brown stink bug and maybe more tolerant of insecticides. Bifenthrin plus acephate is a good tank mix for RBSB. Be able to tell the RBSB from the red-shouldered stink bug (RSSB), as RSSB is much easier to control than RBSB. Both species have a red line that crosses the pronotum on the dorsum (top), so other characters are needed. The RBSB (below) has a long spine on the venter (underside) that sticks up through the base of the hind legs to the base of the middle pair of legs. The RSSB will not have this long spine.

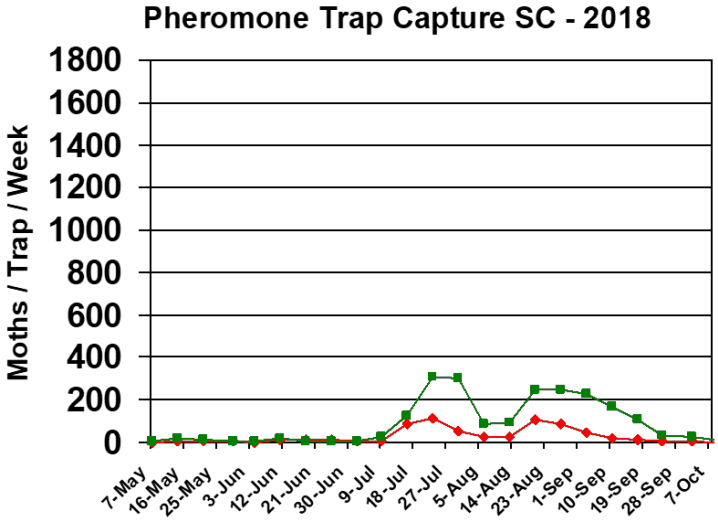
It is never too early to start talking about identifying caterpillars and moths. Start familiarizing yourself with these major species.



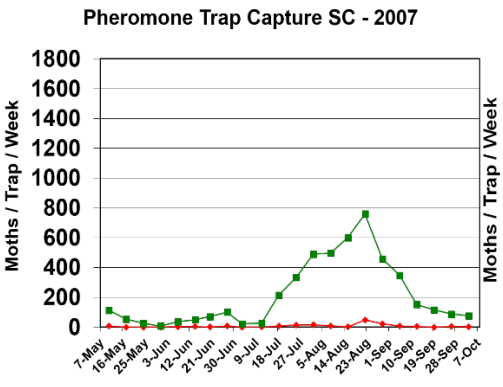
Bollworm & Tobacco Budworm

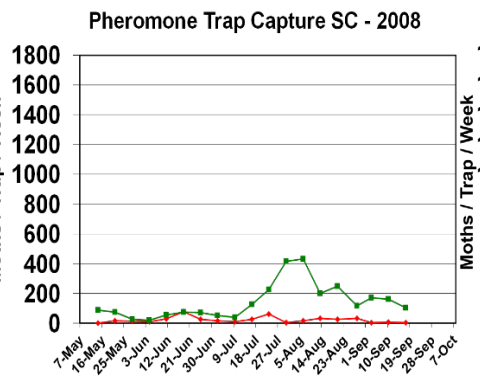
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2018 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

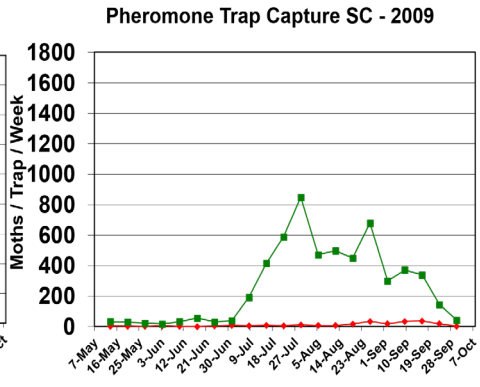


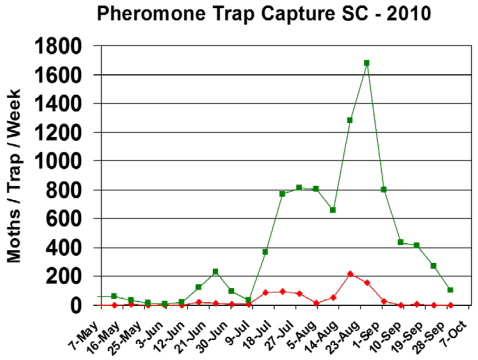


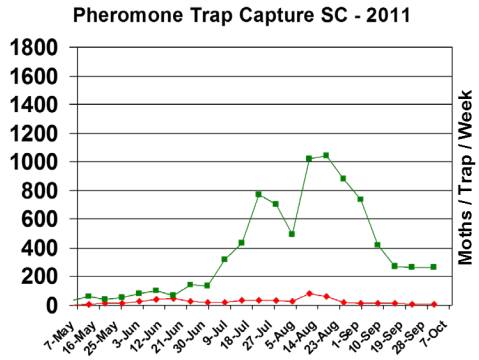
Trap data from 2007-2017 are shown below for reference to other years of trapping data from EREC:

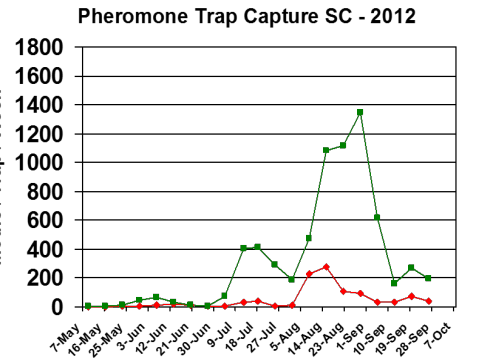


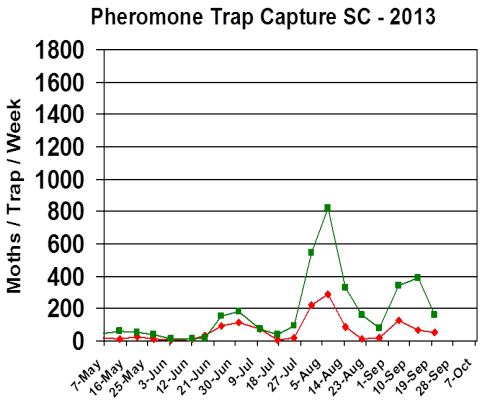


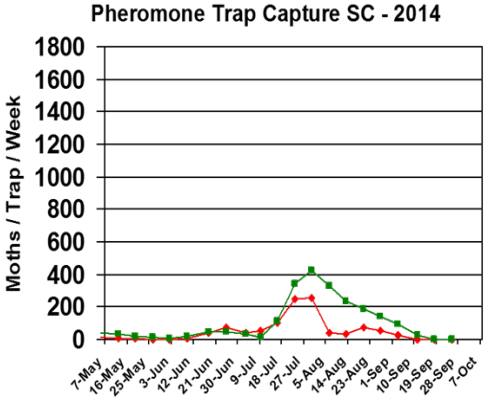


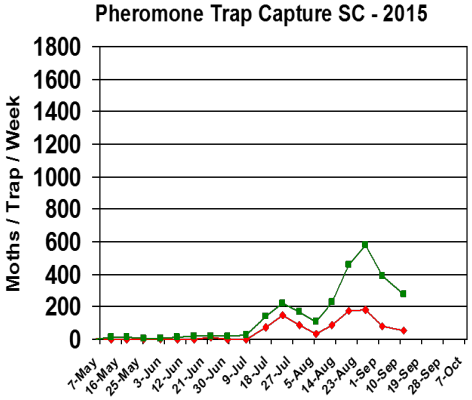


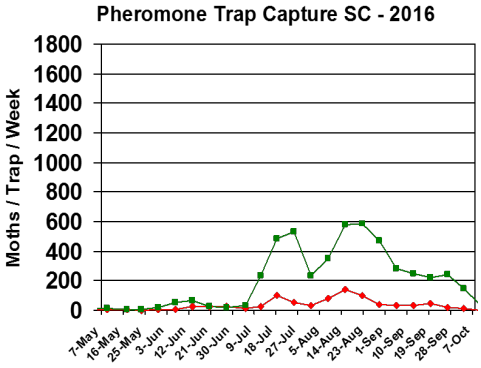


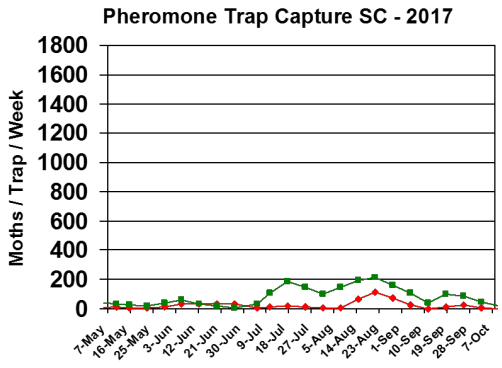








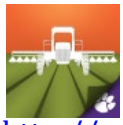




Pest Management Handbook – 2019

Insect control recommendations are available online in the 2019 South Carolina Pest Management Handbook at:
https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

Free Mobile Apps: "Calibrate My Sprayer" and "Mix My Sprayer"



Download our free mobile apps called "Calibrate My Sprayer" and "Mix My Sprayer" that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats):
http://www.clemson.edu/extension/mobile-apps/

Need More Information?

For more Clemson University Extension information: http://www.clemson.edu/extension/

For historical cotton/soybean insect newsletters:
https://www.clemson.edu/extension/agronomy/cotton1/newsletters.html

Sincerely,

Jeremy K. Greene, Ph.D.
Professor of Entomology

Visit our website at:
http://www.clemson.edu